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# WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

February 1, 1981



Snow surveyors making special measurements of the snowpack near Mt. St. Helens Volcano, Washington, April 1980.

# U.S. DEPARTMENT of AGRICULTURE \* SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE SOIL CONSERVATION BOARD STATE ENGINEER of COLORADO and STATE ENGINEER of NEW MEXICO

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# CROP YIELD LOSSES FROM MISSED IRRIGATIONS

Limited water supply is an especially important tepic in making farm decisions this year.

Ouring the entire growing season, the allocation of each unit of available water should go to the crops that will give the farmer the greatest return.

Whenever an Irrigation erganization cannot supply adequate irrigation water to farms during a period when crops need water, the yield of crops not irrigated will docline from the potential yield. The amount of reduction in yield will depend largely on the crops' susceptibility to damage from sell moisture stress. Should a crop undergo soil moisture stress at a crucial stage of growth, such as at pollination or when dally consumptive use is high, yield reductions can be severe.

The fellowing table has been developed to reflect the varying intensity of yield reduction of crops from irrigation water shortages for various time periods during the season. The table shows how the irrigation season is divided into 2-week time periods. The yield loss for each crop indicates the reduction in yield if it were not possible to water the crop during the period. An example would be: Corn yields during the 7th irrigation period may be reduced by approximately 40%. These figures, which are based on presently available research results from experiments in sell maisture stress on irrigated crop yields, are approximations of what occurs when a crop is not watered during a period in which soil moisture needs to be replanished.

Farm decisions as to use of water should be made prior to the growing season and during the growing season. Preseason estimates of the water supply can be helpful to develop the cropping pattern that will give the farmer the greatest return. Once into the growing season, with water supplies that will actually be delivered, any reallocations necessary to maximize benefits can be made. Finally especially during periods of inadequate water, knowledge of plant response to sell moisture stress and irrigation efficiency are vital for making rational decisions for the best use of ilmited irrigation water.

Table 1. Estimated percentage reduction in crop yield when a specified irrigation is not applied to specified crops<sup>2</sup>

Сгор				2-	week	irr	igat	ion	time	per	iods			
	1	2	3	4	5	6	J	6	9	10	11	12	13	14
							Pare	en!						
Alfalfa	_	_	35	_	30	_	_	30	_	_	20	_		-
Beans	-	-	-	-	25	-	30	20	20	15	_	-	-	-
Corn.	-	-	20	-	20	-	40	15	20	_	10	-	-	_
Small grain	25	_	25	-	25	-	-	_	_	-	_	-	_	_
Sorghum	~	-	20	-	15	_	20	20	20	20	15	_	_	_
Sugarbeets	-	20	-	20	~	15	20	-	15	15	25	_	10	_
Potatoea	-	20	-	15	15	15	20	20	20	20	15	6		

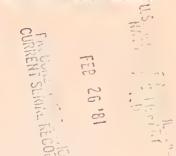
Data and Table 1 from "A Simulation of Irrigation Systems-The Effect of Nator Supply and Operating Rules on Production and Income on Irrigated Farms" by Raymond L. Anderson and Arthur Mass.

2Assumptions Used in Table 1: I. Each acre during each irrigation period recoives either (a) full water requirement or (b) none. Figures represent lesses resulting from none during a period. 2. Two successive "misses" result in total less, except alfalfa.

"The Conservation of Water begins with the Snow Survey"

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CHICAL ESSANT





# WATER SUPPLY CONDITIONS as of

as or

February 1, 1981

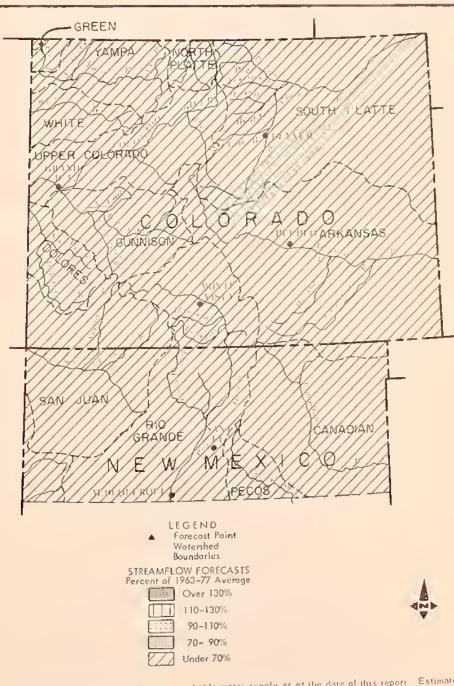
TO DATE THIS WINTER HAS PRODUCED MUCH BELOW NORMAL PRECIPITATION AND ABOVE AVERAGE TEMPERATURES RESULTING IN A BLEAK OUTLOOK FOR THE COMING SEASON'S WATER SUPPLY. ALL STREAMS ARE EXPECTED TO PRODUCE WELL BELOW NORMAL FLOWS. A HIGH PRESSURE SYSTEM HAS DOMINATED THE WESTERN U.S. FOR THE MAJOR PORTION OF THE WINTER. WHEN THIS HIGH PRESSURE SYSTEM HAS BROKEN DOWN, ONLY MINOR STORMS HAVE TRACKED THROUGH COLORADO AND NEW MEXICO. THE MOUNTAIN SNOWPACK IS 65 TO 70 PERCENT BELOW NORMAL IN BOTH STATES.

ALL FORECASTS ARE A JOINT EFFORT OF THE SOIL CONSERVATION SERVICE AND THE

NATIONAL WEATHER SERVICE.

COLORADO -- STATEWIDE THE MOUNTAIN SNOWPACK AVERAGES 36 PERCENT OF NORMAL AND ONLY 30 PERCENT OF WHAT IT WAS A YEAR AGO AT THE SAME TIME. DECEMBER AND JANUARY, WHICH ARE NORMALLY THE TWO HEAVIEST PRECIPITATION MONTHS OF THE WINTER, PRODUCED LESS THAN ONE-THIRD OF AVERAGE. APPROXIMATELY 20 PERCENT OF ALL SNOW COURSES RECORDED NEW MINIMUMS THIS MONTH. WATER SUPPLY FORECASTS RANGE FROM 30 TO 50 PERCENT BELOW NORMAL FOR ALL STREAMS. CARRYOVER RESERVOIR STORAGE IS 110 PERCENT OF AVERAGE.

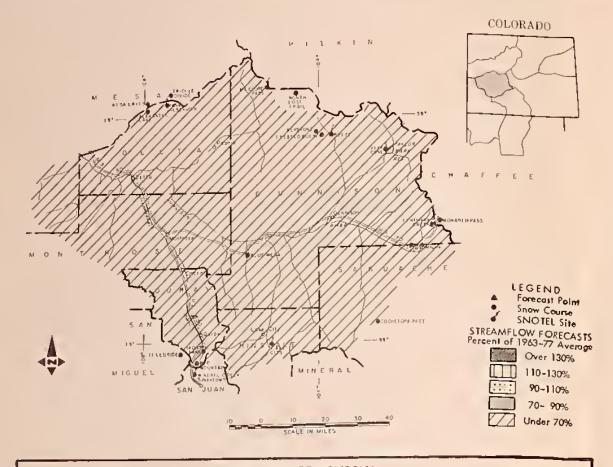
NEW MEXICO -- PRECIPITATION HAS BEEN EXTREMELY DEFICIENT THROUGHOUT
NORTHERN NEW MEXICO THIS WINTER. MOUNTAIN SNOWPACKS ARE 70 PERCENT
BELOW NORMAL LEVELS. PRECIPITATION FOR THE MONTH OF JANUARY WAS ONLY 25
PERCENT OF AVERAGE. WATER SUPPLY FORECASTS ARE FOR FLOWS 40 TO 60 PERCENT
BELOW NORMAL. STREAMS WITH LOW ELEVATION HEADWATERS CAN EXPECT VERY POOR
RUNOFF THIS SPRING. STORAGE IN MAJOR RESERVOIRS IS THE ONLY BRIGHT SPOT WITH
CURRENT CONTENT TWICE NORMAL. SOIL MOISTURE CONDITIONS ARE GENERALLY POOR IN
ALL AREAS.



The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall precipitation and other factors from this date to the end of the lore—cast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to impated areas along the main streams and may not indicate conditions on small tributaries.



# GUNNISON RIVER WATERSHED IN COLORADO



# YOUR WATER SUPPLY

A VERY DRY WINTER HAS RESULTED IN PREDICTIONS OF A POOR WATER SUPPLY THROUGHOUT THE BASIN FOR THE COMING SPRING AND SUMMER. STREAMFLOW FORECASTS ARE FOR FLOWS ONE-THIRD BELOW AVERAGE. PRECIPITATION DURING JANUARY WAS ONLY 35 PERCENT OF NORMAL. THE MOUNTAIN SNOWPACK IS CURRENTLY 43 PERCENT OF AVERAGE AND 63 PERCENT BELOW WHAT IT WAS A YEAR AGO AT THE SAME TIME. RESERVOIR STORAGE IS 12 PERCENT BETTER THAN NORMAL BUT 7 PERCENT BELOW A YEAR AGO. SOIL MOISTURE CONDITIONS ARE RATED AS FAIR.

## STREAMFLOW FORECASTS (1000 Ac. Ft.) April - September

FORECAST POINT	Porecast	5 of Average	1963-77 Average
Gunnison River inflow to Blue Mesa Reservoir (1) Gunnison River near Grand Junction (2) North Fork of Gunnison (3) Surface Creek at Cedaredge Uncompangre River at Colona	500	66	754.0
	725	63	1150.0
	175	67	262.0
	10	66	15.2
	88	68	129.5

the Observed flow plus shangs in almost in Taylor Retission - 421 Observed flow play shange in almost in Blus Miss, Morror Point and Taylor Represent.

(31 Observed flow plus shangs in elongs in Pagnic Reservoir

# WATER SUPPLY OUTLOOK Collect With Respect to Usual Supply

Ohio Creek fair	t Lair n Season
Ohio Creek fair	
Slate River fair Taylor River fair Tomichi Creek fair	poor

# RESERVOIR STORAGE (Thousand Ac. ft.) END OF MONTH

Batin of Street	Urable	Onable Sicials			
RESERVOIR	Capaziti	Thona Yaste	CIII	1953-17 Average	
Blue Mesa Morrow Point Taylor	830 121 106	480 113 54	513 114 72	417 97 63	

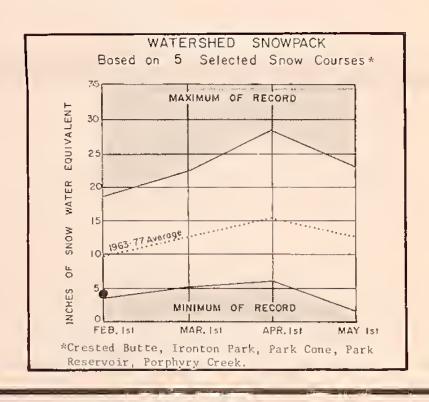
# SUMMARY of SNOW MEASUREMENTS

RIVER BASIN	Number of Courter	THIS YE	AR'S SNOW PERCENT OF
SUB-WATERSHED	Aviraged	Last Year	1963-77 Average
Gunnison Surface Creek Uncompahgre	12 3 3	32 44 48	39 52 46

## SHOW COURSE MEASUREMENTS

	CURR	ENT INFORM	ATION	PAST R	ECORD
SNOW COURSE	DATE	SNOW DEPTH	AATER CONTENT	WATER CO	ONTENT
	SURVEY	INCHES:	INCHEST	LAST TEAR	AVG 53-77
GUNNISON BASIN					
Gunnison River					
Alexander Lake	1/30	30	6.2	15.7	12.8
Blue Mesa	1/29	chedule 18	3.2	13.4	9.8
Butte	1/21	6	1.0	3.9	3,6
Cochetopa Pass (B) Crested Butte	1/21	18	3.1	13.9	8,3
Keystone	1/28	18	3.5	19.2	12,7
Lake City	1/20	11	1.7	4.5	5.0
Mesa Lakes (B)	1/29	25	5.3	10.3	10.2
McClure Pass	1/29	19	4.2	12.4	10.6
Park Cone	2/03	19	3.2	7,3	6.3
Park Reservoir	1/30	39	8.2	19.0	14.5
Porphyry Creek	1/28	17	2.8	11.4	10.3
Slumgullion	1/20	19	3.6	8.9	
Tomichi	1/28	10	1.6	8.8	8,6
Surface Creek					
Alexander Lake	1/30	30	6,2	15.7	12.8
Mesa Lakes	1/29	25	5.3	10.3	10.2
Park Reservoir	1/30	39	8.2	19.0	14.5
Uncompangre River					
Idarado	1/29	21	4.0	9,3	~
Ironton Park	1/29	17	3.4	8.2	9.0
Red Mountain Pass	1/28	38	8.8	18.3	18.9
Telluride (B)	1/28	18	2.9	4.7	5.3

TS-To sweep. TS:-'n rijvoen: inwinoge.



# LIST OF COOPERATORS

The following organizations cooperate in snow surveys for the Coforada, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

Colorada State Engineer Colorado State Soil Conservation Board New Mexico State Engineer Calorada State University Experiment Station
Rocky Mountain Forest and Range Experiment Station New Mexico Dept, of Game and Fish University of Colorado, INSTAAR

# FEDERAL

Department of Agriculture Farest Service Soil Conservation Service Deportment of Interior Sureau of Reclamation Geological Survey Notional Park Service Department of Cammerce NOAA, Notional Weather Service Defense Department Army Engineer Corps National Aeranautics and Space Administration Goddard Space Flight Center

INVESTOR OWNED UTILITIES Colorada Public Service Campany Public Service Compony of New Mexico

# MUNICIPALITIES

City of Denver City of Soulder

City of Greeley City of Fart Collins

# WATER USERS ORGANIZATIONS Arkansas Valley Ditch Association Calarado River Water Conservation District

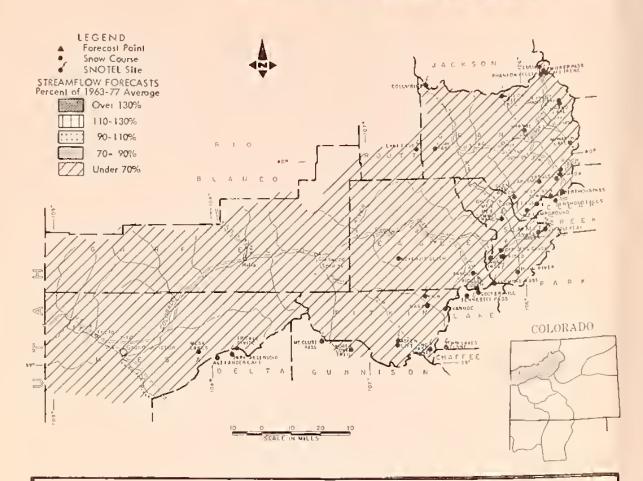
# IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigotion District
Santa Maria Reservoir Compony Costilla Land Company Montezuma Irrigation Co. Uncompangre Valley Water Users' Association Twin Lakes Reservoir and Canal Campony Trinchera Irrigation Co.

CORPORATIONS
Aspen Skiing Corp.
Colorado Fuel and Iron Carp. Climax Molybdenum Corp. Copper Mountain Ski Area
Lake Eldora Corp.
Vail Associates, Incorporated
Vermejo Park Carp. (NM)
Toylor Lumber and Land Company Idarado Mining Corp.

PRIVATE CITIZENS Otto Goemmer, Colorado Moreno Ranch, New Mexico

# COLORADO RIVER WATERSHED IN COLORADO



## YOUR WATER SUPPLY

NLESS UNUSUALLY HEAVY PRECIPITATION OCCURS IN THE NEXT SEVERAL MONTHS, WATER SUPPLIES ARE PREDICTED TO BE POOR RANGING FROM 30 TO 45 PERCENT BELOW NORMAL. ANUARY CONTINUES IN THE PATTERN OF DECEMBER WITH PRECIPITATION FOR THE MONTH ONLY ABOUT 25 PERCENT OF AVERAGE. SEVERAL SNOW COURSES IN THE HEADWATERS NEAR THE CONTINENTAL DIVIDE RECORDED SNOWPACKS BELOW PREVIOUS ALL-TIME MINIMUMS. ALTHOUGH SPRING RUNOFF IS FORECASTED AS POOR, RESERVOIR CONTENTS WHICH ARE CURRENTLY 15 PERCENT ABOVE NORMAL WILL HELP WATER USERS WITH STORED RIGHTS MEET

## STREAMFLOW FORECASTS (1000 Ac. Ft.) April - September

FORECAST POINT	Polecast	™ of Average	1963-77 Average
Troublesome Creek, East Fork, near Troublesome Blue River inflow to Dillon Reservoir Blue River inflow to Green Mountain Reservoir (1) Colorado River near Cameo (2) Colorado River near Dotsero (3) Colorado River inflow to Granby Reservoir (4) Eagle River below Gypsum Roaring Fork at Glenwood Springs (5)	10	59	17.0
	115	69	167.0
	200	70	287.0
	1460	63	2336.0,
	940	66	1422.0
	145	66	218.0
	186	62	298.0
	480	69	697.0
Williams Fork near Parshall (6) Willow Creek inflow to Willow Creek Reservoir	33	56	59.0
	32	67	48.0

# RESERVOIR STORAGE (Thousand Ac. FL.) END OF MORTH

Barrio de Streens	Usable	1	Jaable Sloia	20
RESERVOIR	Cipariti	That Ly p	( p)	IRuji77 Airiage
Dillon Cranby Green Mountain Homestake Ruedi Vega Williams Fork Willow Creek	254 466 139 43 101 32 97 9	194 339 76 25 78 9 71 6	232 279 80 28 84 11 45 7	202 264 76 21 69 11 42 6

WATER	SUPPLY	OUTLOOK	Fail Poor F Ailh Reapeat	
	STREAM	ABBA to A	 Flow P	4
Brus	h		6 a d a	

	Flow Period			
STREAM OF AREA	Seeton	\$23100 \$23100		
Brush	fair	poor		
Gypsum Creek	fair	poor		



Crystal River near McClure Pass.

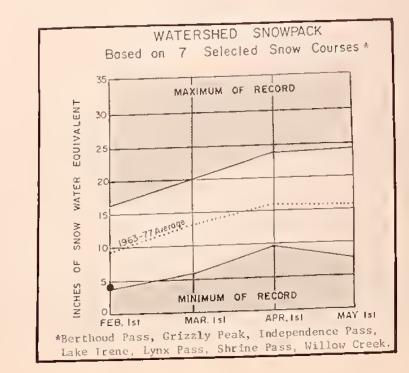
## SUMMARY OF SHOW MEASUREMENTS

RIVER BASIN	Numbi of	THIS YEAR'S SNUA MATER AS PERCENT OF		
Sub-AATERSHED  Blue River	Coultri Averiges	Latt Lear	1961 71 Airrain	
Blue River	7	34	45	
Colorado	19	30	38	
Plateau	3	44	53	
Roaring Fork	8	37	41	
Williams Fork	3	26	38	
Willow	2	22	26	
			-	

## SNOW COURSE MEASUREMENTS

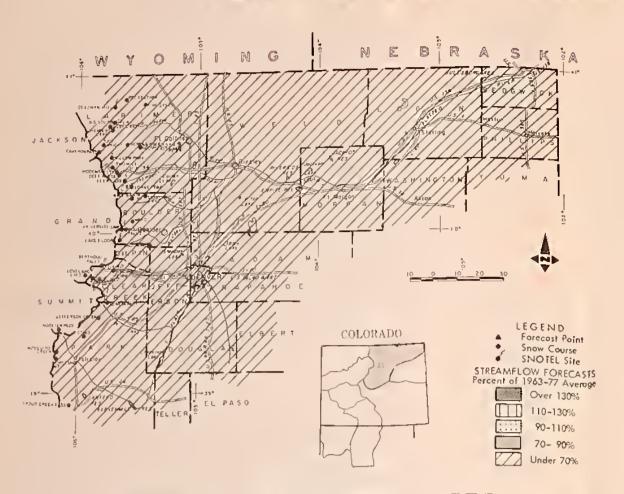
SNOW COURSE	DATE	SNOW	MATER	MATER CO	NTENT ESI	
SHOW COOKSE	OF SURVEY	SNON DEPTH [INCHES]	MATER CONTENT INCHES	LAST	AVG. 41-71	
COLORADO BASIN						
Blue River						
Blue River Fremont Pass Grizzly Peak Hoosier Pass Officers Gulch Shrine Pass Snake River	1/30 1/27 1/30 1/30 1/29 1/28 1/29	30 21 24 10 4 25 8	6.2 3.4 5.2 2.4 0.8 4.6 1,2	8.8 13.3 13.1 11.1 6.6 11.8	5.2 9.6 10.6 7.7  10.3 5.3	
Summit Ranch	1/26	6	0.9	6.8	4.8	١
Colorado River						l
Arrow Berthoud Pass Berthoud Summit Cooper Hill Copper Mountain Glenmar Ranch Gore Pass Grand Lake Lake Irene Lapland Lulu Lynx Pass McKenzic Gulch Middle Fork Milner North Inlet Pando Phantom Valley Ranch Creek Tennessee Pass (B)	1/27 1/28 1/26 1/20 1/30 1/2 1/3 1/2 1/3	27 23 17 18 13 8 16 26 13 Schedu 15 10 13 18 9 8 7 0 14 13 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	2.4 1.8 1.8 3.4 1.5 1.0 3.0 3.0	7.3 7.8 8.6 1 7.	6.0	35049
Vail Mountain Vasquez	1/2				-	6
Plateau Creek  Mesa Lakes  Park Reservoir	1/2			10.3		
Trickle Divide	1/2				15.	5
Roaring Fork  Aspen Independence Pass Ivanhoe Kiln Lift McClure Pass Nast North Lost Trail	1/2 1/2 1/2 1/2 1/2 1/2 1/2	29 23 28 27 28 18 26 24 29 19 28 8	4,6 4,8 3,0 5,6 4,3	13.2 3   11.3 7.6 4   11.3 2   12.6 3   5.6	9, 10, 5, 7, 10, 4, 4,	3 6 8 1 6 3
Williams Fork River Glenmar Ranch Jones Pass			3,	8 12,	5 8.	. 7
Middle Fork Ute Pass Willow Creek	1/3				3	
Granby Willow Creek Pass	1/	27 7 29 16				
35-lle survey,						

NS-No survey. (8)-On adjacent drainage.





# SOUTH PLATTE RIVER WATERSHED IN COLORADO



# YOUR WATER SUPPLY

THE SOUTH PLATTE BASIN IS THE WORST AREA IN THE STATE IN TERMS OF THE AMOUNT OF SNOW IN THE MOUNTAINS AVAILABLE TO PRODUCE RUNOFF. MANY SNOW COURSES ALONG THE FRONT RANGE NOW SHOW SNOWPACK AMOUNTS BELOW ANY RECORDED IN THE PAST 43 YEARS. TAKEN AS A WHOLE THE SNOWPACK IN THE BASIN 1S ONLY 31 PERCENT OF NORMAL. STREAMFLOW FORECASTS ARE FOR FLOWS 38 TO 56 PERCENT BELOW AVERAGE. ABOUT 60 PERCENT THE NORMAL SNOW ACCUMULATION SEASON IS GONE. RESERVOIRS WILL PROVIDE SOME RELIEF TO WATER USERS WHO MAVE STORED WATER RIGHTS SINCE THEY ARE CURRENTLY 6 PERCENT ABOVE AVERAGE. SOIL MOISTURE CONDITIONS ARE GENERALLY POOR.

# STREAMFLOW FORECASTS (1000 Ac. Ft.) April - September

FORECAST POINT	Forecast	% of Average	1961-77 Avente
Bear Creek at Morrison Big Thompson River at Drake (1) Boulder Creek at Orodell Cache La Poudre River at Canyon Mouth (2) Clear Creek at Golden (3) St. Vrain Creek at Lyons South Platte River at South Platte	16 61 28 158 74 44 105	57 60 62 65 62 62 62 54	23.0 102.0 45.1 243.0 120.0 71.6 193.0

11) Observed flow plan by price to power plants. 12) Observed flow whose transferred direction plan wanterpal and irregation discretions. (3) Observed flow whose direction through degree P. Guellet Tunnel.

Union Windsor

# WATER SUPPLY OUTLOOK Expedited at "Poor Fail Asked Ess-

	Flow Period		
STREAM of AREA	Spling Season	Late Seaton	
Coal Creek	Poor	Poor	
North Fork of South			
Platte	Poor	Poor	
North Fork of Cache			
La Poudre	Fair	Poor	
Ralston Creek	Poor	Poor	
Rock Creek	Poor	Poor	
South Platte from			
Greeley to Fort			
Morgan	Poor	Poor	
South Platte from			
Fort Morgan to			
Sterling	Poor	Poor	
South Platte below			
Sterling	Poor	Poor	

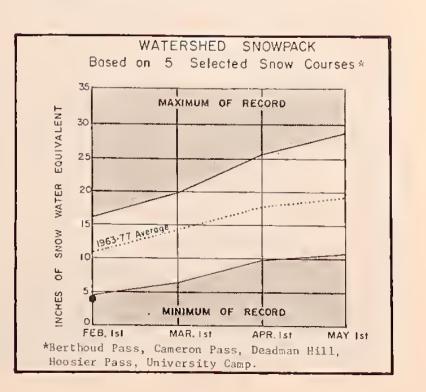
ESERVOIR STORAGE (	Thousan	d Ac. F	(,) END OF	HTHOM:	
Batin or Stilliam	Ulable		Ustale Storag		1
RESERVOIR	Capasali	They Train	1,311	1943-77 Avelage	
Antero	16	16	16	14	l
Barr Lake	32	24	24	22	L
Black Hollow	8	3	4	4	l
Boyd Lake	44	35	40	37	ı
Cache La Poudre	10	7	9	7	ı
Carter Lake	109	76	89	81	
Chambers Lake	9	2	6	3	1
Cheesman	79	75	69	48	L
Cobb Lake	34	12	20	14	ı
Eleven Mile	98	96	98	87	l
Empire	38	28	15	23	ı
Fossil Creek	12	3	5	7	l
Gross	43	21	22	28	ı
Halligan	6	6	5	3	ı
Horsetooth	144	90	108	83	ı
Jackson	35	33	31	29	ı
Julesburg	28	21	18	20	L
Lake Loveland	14	11	10	9	Ĭ.
Lone Tree	9	2	8	6	ı
Mariano	6	5	5	5	ı
Marshall	10	5	6	4	ı
Marston	17	16	16	15	
Milton	24	16	16	13	1
Point of Rocks	70	69	68	55	I
Prewitt	33	12	19	18	
Riverside	58	29	34	44	
Standley	42	33	40	21	1
T				~ ~	П

# SUMMARY of SNOW MEASUREMENTS

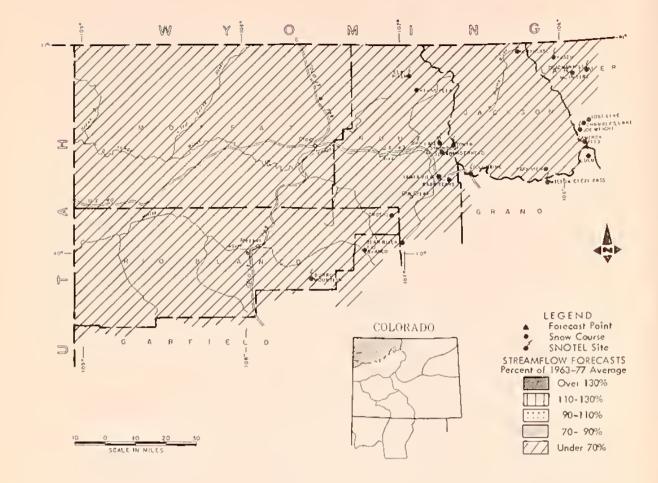
SUE-WATERSHED	Courter		
	Averaged	Laji Leai	1963-77 Axeragi
Big Thompson	5	24	34
Boulder	3	9	14
Cache La Poudre	9	27	36
Clear Creek	5	21	33
Saint Vrain	2	4	10
South Platte	7	19	28

## SHOW COURSE MEASUREMENTS

	DATE	SNOW	WATER	WATER CO	ES)
SNOW COURSE	SURVEY	DEPTH (INCHES)	CONTENT	LAST TEAR	AVG. 61-71
SOUTH PLATTE BASIN Boulder Creek					
Baltimore Boulder Falls Lake Eldora University Camp Big Thompson River	1/29 1/28 1/26 1/28	6 9 10	0.5 1.0 1.0 1.5	8.2 11.3 12.0 15.2	4.2 7.2 : 9.9
Bear Lake Deer Ridge Hidden Valley Lake Irene (B) Long's Peak Two Mile Willow Park	1/29 1/28 1/28 1/29 1/28 1/28 1/27	16 4 13 26 8 13	2.5 0.9 2.3 5.0 1.9 2.1 3.0	15.8 5.2 7.6 15.5 11.6	2.9 5.9 13.2 5.9 8.3
Cache La Poudre  Bennett Creek  Big South Cameron Pass Chambers Lake Deadman Hill Hourglass Lake Joe Wright Lost Lake Red Feather	1/28 1/30 1/30 1/30 1/29 1/28 1/30 1/30 1/29	7 2 17 4 23 7 34 11 6	1.3 0.3 5.2 0.6 5.4 1.2 8.4 1.7 1.3	8.5 4.0 17.3 9.2 12.0 7.7 16.9 10.9 8.0	4.8 1.2 17.8 5.9 9.9 4.0 15.3 7.5 4.0
Baltimore (B) Berthoud Falls Empire Grizzly Peak (B) Loveland Pass	1/29 1/29 1/29 1/30 1/30	4 12 7 24 19	0.5 2.0 1.1 5.2 3.3	8.2 14.2 7.8 13.1 13.2	4.2 8.5 4.2 10.6 9.3
St. Vrain River Copeland Lake Ward Wild Basin	1/29 1/26 1/29		0.6 0.0 1.3	8.0	2.7 3.3 6.8
South Platte River Bison Reservoir Como Geneva Park Horseshoe Mountain Hoosier Pass Jefferson Creek Mosquito Niwot Trout Creek Pass	1/25 1/28 1/28 1/28 1/30 1/28 1/28 2/02 1/28	4 0 11 10 11 7	0.0 0.8 0.0 1.8 2.4 2.2 1.3 1.1	5.6 5.5 4.1 10.0 11.1 7.8 10.1  5.8	4.4 2.7 6.4 7.7 5.7 6.3



# YAMPA, WHITE AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO



YOUR WATER SUPPLY THE COMING SPRING AND SUMMER IS FORECAST TO RESULT IN ABNORMALLY LOW WATER SUPPLIES ON ALL STREAMS. PREDICTIONS RANGE FROM 55 TO 68 PERCENT OF AVERAGE. THESE FORECASTS ARE A RESULT OF EXTREMELY DEFICIENT PRECIPITATION DURING DECEMBER AND JANUARY. THE MOUNTAIN SNOWPACK IS ONLY 32 PERCENT OF NORMAL WHICH IS 70 PERCENT BELOW THE SAME TIME LAST YEAR. COLUMBINE LODGE, WILLOW CREEK PASS AND CAMERON PASS SNOW COURSES ALL RECORDED THE LOWEST SNOWPACK FOR THIS TIME OF YEAR SINCE 1936. THE STORM WHICH OCCURRED THE LAST OF JANUARY AFTER MOST SURVEYS WERE COMPLETED DID NOT CHANGE THE SNOWPACK SITUATION APPRECIABLY.

# STREAMFLOW FORECASTS (1000 Ac. Ft.) April - September

FORECAST POINT	Forecast	% of Average	1963-77 Average
Elk River at Clark Laramie River near Woods Little Snake River at Lily North Platte River at Northgate White River near Meeker Yampa River near Maybell Yampa River at Steamboat Springs	110	56	198.0
	75	60	125.0
	210	60	349.0
	150	63	238.0
	195	68	287.0
	500	55	905.0
	180	66	273.0

# SUMMARY of SNOW MEASUREMENTS

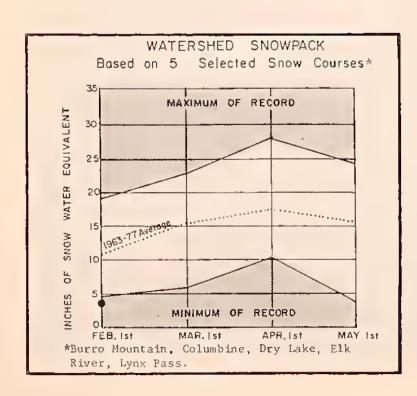
SUB-WATERSHED  Elk  Laramie	Coultry Averiged	24	19h3-17 A-F-126
Laramie	2	24	0.6
			7.6
A I Th. I	2	37	26 48
North Platte	5	23	24
White	2	32	29
Yampa	6	32	35

Rabbit Ears 1/26 27 5.9 16.3 15.8 Tower 1/27 48 12.0 32.D 30. 1/26 18 3.3 12.0 10.1	_		CURRI	ENT INFORM	ATION	PAST RE	CORO
NORTH PLATTE BASIN  Laramie River  Deadman Hill McIntyre Roach  Not Scheduled 1/27 27 4.9 16.0 11.5  North Platte River  Cameron Pass Columbine Lodge Northgate Park View Willow Cr. Pass (B)  YAMPA BASIN  Elk River Elk River Hahn's Peak 1/26 16 2.4 11.6 10.0  White River Burro Mountain Rio Blanco 1/28 15 3.3 10.8 9.2  Yampa River  Bear River Columbine (B) Crosho Dry Lake Lynx Pass (B) Rabbit Ears Tower Yampa View  Not Scheduled 1/27 15 3.2 17.3 17.8 12.0 9.9 9.9 9.9 14.7 14.5 15 3.2 17.3 17.8 12.0 32.0 3.6 14.7 14.5 17.8 17.8 17.8 17.8 17.8 17.8 17.8 17.8	Γ	SHOW COURSE	OF	SHOW DEPTH	WATER		_
Laramie River	L		SURVEY	TINCHEST	IIMCHES)	LAST VEAR	AVG 63-73
Deadman Hill   NcIntyre   Roach   Not Scheduled   1/27   27   4.9   16.0   11.5							
Not Scheduled   1/27   27   4.9   16.0   11.5	1						
Roach	1			1 -		1	9.9
Cameron Pass Columbine Lodge Northgate Park View Willow Cr. Pass (B)  YAMPA BASIN Elk River Hahn's Peak Burro Mountain Rio Blanco Vampa River Bear River Columbine (B) Crosho Dry Lake Lynx Pass (B) Rabbit Ears Tower Yampa View  1/26 113 2.8 14.7 14.5 14.5 1.29 12 1.8 6.5 6.0 3.3 12.5 11.6 10.0 3.3 12.5 11.6 10.0 3.3 12.5 11.6 10.0 3.3 10.8 9.2 3.3 10.8 9.2 4.7 1.5 3.2 14.7 14.5 7.5 3.2 14.7 11.5 3.2 14.7 14.5 3.3 3.3 10.8 3.3 10.8 3.3 10.8 3.3 10.8 3.3 10.8 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	1	-					11.5
Columbine Lodge Northgate Park View Willow Cr. Pass (B)   1/29   12   1.8   6.5   6.0	ı	North Platte River					
Northgate   Park View   Willow Cr. Pass (B)   1/29   12   1.8   6.5   6.0	١		1/30	17	5.2	17.3	17.8
Park View   Willow Cr. Pass (B)   1/29   12   1.8   6.5   6.0	١	0			_		
Willow Cr. Pass (B)       1/29       16       2.2       8.9       7.8         YAMPA BASIN       Elk River       1/26       20       3.3       12.5       11.6         Elk River       1/26       16       2.4       11.6       10.0         White River       1/26       16       2.4       11.6       10.0         White River       1/28       13       2.8       8.3       11.1         Rio Blanco       1/28       15       3.3       10.8       9.2         Yampa River       1/28       15       3.3       10.8       9.2         Crosho       Not Scheduled       1/27       15       3.2       14.7       14.5         Crosho       Not Scheduled       1/27       15       3.2       16.3       15.8         Rabbit Ears       1/26       27       5.9       16.3       15.8         Tower       1/26       18       3.3       12.0       10.3         White River       1/27       15       3.2       16.3       15.8         Robit Ears       1/26       27       5.9       16.3       15.8         Robit Ears       1/26       18       3.3       12.0 <td>١</td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td>	١			_			
Elk River Elk River Hahn's Peak    1/26   20   3.3   12.5   11.6	ł	Willow Cr. Pass (B)		16			
Elk River Hahn's Peak    1/26	l	YAMPA BASIN					
### ### ##############################	I	Elk River					
Burro Mountain Rio Blanco  Yampa River  Bear River Columbine (B) Crosho Dry Lake Lynx Pass (B) Rabbit Ears Tower Yampa View  1/26 1/26 1/27 15 126 27 18 13 2.8 8.3 11.1 9.2  10.8 9.2  14.7 14.5 14.5 14.5 11.5 12.6 17.5 18 18 19.2 14.7 14.5 14.5 14.7 11.5 12.6 17.5 17.5 17.5 17.6 17.6 18 18 19.2 14.7 14.5 14.5 14.5 14.5 14.5 14.5 14.5 14.5							
Rio Blanco       1/28       15       3.3       10.8       9.2         Yampa River       Bear River       Columbine (B)       1/26       20       3.6       14.7       14.5         Crosho       Not Scheduled       1/27       15       3.2       14.7       11.5         Lynx Pass (B)       1/27       15       3.2       B.5       7.5         Rabbit Ears       1/26       27       5.9       16.3       15.8         Tower       1/27       48       12.0       32.D       30.         Yampa View       1/26       18       3.3       12.0       10.3	١	White River					
Bear River Columbine (B) Crosho Dry Lake Lynx Pass (B) Rabbit Ears Tower Yampa View  1/26  1/26  20  3.6  14.7  14.5  14.5  3.2  14.7  11.5  3.2  14.7  11.5  3.2  14.7  11.5  3.2  14.7  11.5  3.2  14.7  11.5  3.2  12.0  15.8  1/26  17.5  18.8  1.20  1.20  10.1						1	
Columbine (B)	l	Yampa River					
Crosho Dry Lake 1/27   15   3.2   14.7   11.5 Lynx Pass (B)   1/27   15   3.2   B.5   7.5 Rabbit Ears   1/26   27   5.9   16.3   15.8 Tower   1/27   48   12.0   32.D   30. Yampa View   1/26   18   3.3   12.0   10.3	1	Bear River			-		
Dry Lake Lynx Pass (B) Rabbit Ears Tower Yampa View  1/27 15 3.2 B.5 7.5 7.5 1/26 27 48 12.0 32.D 33.0 1/27 18 3.3 12.0 10.1	١		1 1				1
Lynx Pass (B)				1			
Tower Yampa View  1/27 1/26  1/26  1/26  1/26  1/26  1/26  1/26  1/26  1/26  1/26  1/26  1/26  1/26  1/26  1/26  1/26  1/26							7.5
Yampa View 1/26 18 3.3 12.0 10.3				1	1		
IIS-No survey.		Yampa View					
IIS-No survey.					}		
IIS-No survey.							
IIS-No survey.							
NS-No survey.							
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NS-No survey.							
NS-No survey.							
		US-No survey.				,	

(B)=On adjacent drainage.

# WATER SUPPLY OUTLOOK Experied at "Poot, Fait, Average, Excellent" With Respect to Usual Supply

	Flow F	Leipd
STREAM OF AREA	Serion	Late Searon
Canadian River Hunt Creek Illinois River Michigan River Oak Creek Trout Creek	Fair Poor Fair Fair Fair Poor	Poor Poor Poor Poor Poor

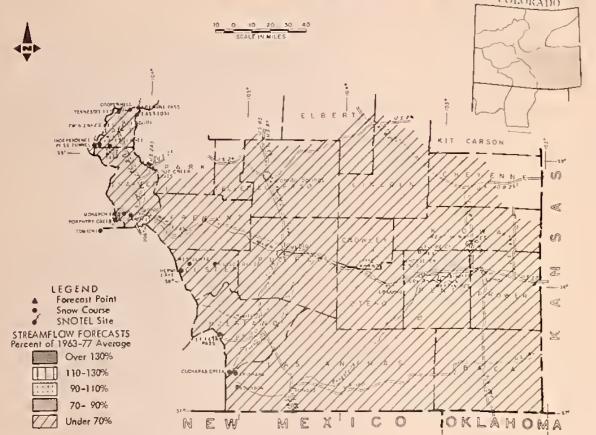




Manual snow course reading taken on Buffalo Pass during a better year.



# ARKANSAS RIVER WATERSHED IN COLORADO



# YOUR WATER SUPPLY

SNOWPACK CONDITIONS WHICH ARE 70 TO 80 PERCENT BELOW THE NORM FOR THIS TIME OF YEAR ARE PREDICTED TO PRODUCE STREAMFLOWS NEXT SUMMER 34 TO 48 PERCENT BELOW AVERAGE ASSUMING WE RECEIVE NORMAL PRECIPITATION FOR THE REMAINDER OF THE WINTER AND SPRING. IF THE CURRENT DRY PATTERN PERSISTS FORECASTS WILL DROP MARKEDLY NEXT MONTH. FREMONT PASS SNOW COURSE NEAR CLIMAX, HIGH IN THE HEADWATERS OF THE ARKANSAS RIVER, RECORDED THE LOWEST SNOWPACK IN THE PAST 41 YEARS. STORAGE IN MANY RESERVOIRS IS BETTER THAN A YEAR AGO AND THIS SHOULD HELP ALLEVIATE THE ANTICIPATED SHORTAGE OF IRRIGATION WATER.

## STREAMFLOW FORECASTS (1000 Ac. Ft.) April - September

FORECAST POINT	Forecast	% of Average	1963-77 Average
Arkansas River abv Pueblo (1)	145	56	250.0
Arkansas River at Salida (2)	190	66	2,8.0
Cucharas River near La Veta	6	66	9.1
Huerfano River near Redwing	7	52	13.4
Purgatoire River at Trinidad (3)	20	61	32.8
Grape Creek near Westcliffe	. 9	56	16.0

(1) Plus change in steen in Public Reservoirs. (2) Observed flor plus thange in Class Greek, Term Lake and Turquose Reservoirs wing a ferritary in through Bast I combos, Equation, I have Fore Lakes and Howestate Turnels and Energy Ferron Paris, Novice and Combos and C

# RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

Basin or Sileson	Usabla	L.	Inable Storag	(I
RESERVOIR	Capaciti	₹ħ+i Teal	L ASI I Sa+	1961-77 Average
Adobe	60	34	0	12
Clear Creek	11	5	6	7
Great Plains	150	13	0	35
Holbrook Lake	7.	0	3	-
Horse Creek	27	17	7	5
John Martin	621	57	22	52
Lake Henry	8	2	2	-
Meredith	42	2	0	10
Pueblo	351	57	43	-
Trinidad	158	42	21	_
Turquoise	121	51	71	30
Twin Lakes	68	43	33	2.6

	Flow P	111000
STREAM of AREA	Spiina Spiina	Late Season
Apishapa River	Poor	Poor
Fountain Creek	Poor	Poor
Hardscrabble Creek	Poor	Poor
Monument Creek	Poor	Poor

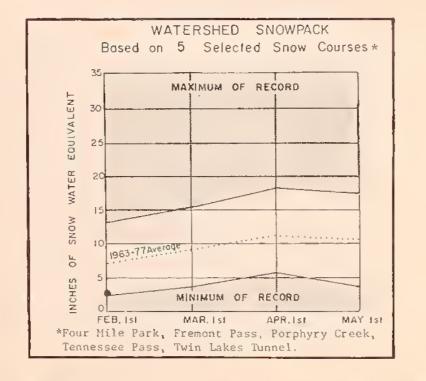
SNOW COURSE	OATE OF	SHO# OEPTH	WATER	HATER CO		
	SURVEY	JINCHES)	CONTENT (INCHES)	LAST YEAR	AVG 6T-77	
ARKANSAS BASIN						
Arkansas River						
Bigelow Divide	1/27	0	0.0	6.2	4.9	
Brumley Cooper Hill (B)	1/29	17	2.9	8.9		
East Fork	1/29	17	3.2	7.9	6.9	
Four Mile Park	1/29	10	1.4	4.5		
Fremont Pass	1/27	21	3.4	13.3	9.6	
Garfield	1/28	13	2 - 4	11.8		
Hermit Lake	1/27	4	1.3	6.0	6.4	
Monarch Pass	1/28	15	2.6	13.1	10.1	
South Colony	1/29	23	5.6	12.8	-~-	
Tennessee Pass	1/27	7	1.1	7.6	6.3	
Twin Lakes Tunnel	1/29	17	3.0	10.2	5.5	
Westcliffe	1/27	7	1.8	5.4	5,4	ı
Cucharas River						
Apishapa	1/28	4	0.9	6.7	5.0	ı
Cucharas Creek	1/28	6	1.2	6.6		ı
La Veta Pass (B)	1/28	10	2.6	6.4	5.9	ı
Huerfano Purgatoire River	1/28	0	0.0	5.9		
Bourbon	1/28	7	1.0	5.9	4.9	
Whiskey Creek	1/28	0	0.0	6.5		
	<u> </u>					

75-75 survey. (B)-On odjacen: drainage.

SUMMARY OF SNOW MEASUREMENTS

Arkansas

Cucharas Purgatoire



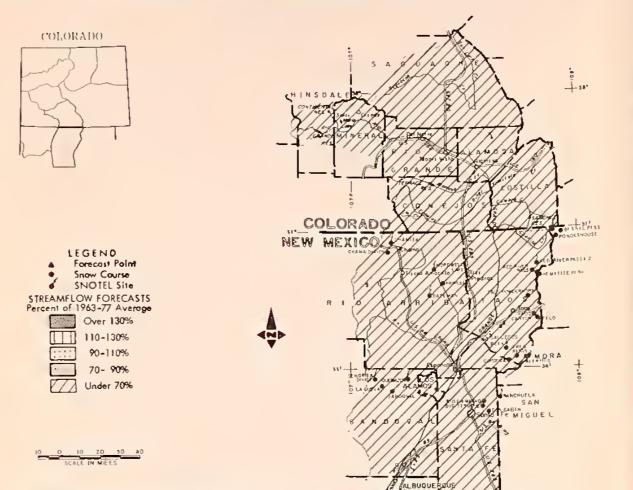


Sometimes it goes. And sometimes it doesn't.



View of typical automated snow measuring site during the summer.

# RIO GRANDE WATERSHED IN COLORADO AND NEW MEXICO



# RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

Basen of Stream	Usable	Usable Sipiage			
AND DI RESERVOIR	C3p3C+11	This Year	t Ail Year	1963-77 Avelage	
COLORADO					
Continental	27	8	6	4	
Platoro	75	20	31	9 :	
Rio Grande	51	21	40	16	
Sanchez	103	_	23	10	
Santa Maria	45	10	12	6	
Terrace	18	0	-	6	
NEW MEXICO					
AvaIon	. 5	4	4	3	
Caballo	344	106	110	40	l
Conchas	273	37	75	134	ı
El Vado	195	108	124	31	ı
Elephant Butte	2195	1345	938	405	ı
McMillan	34	24	15	14	ı
Sumner	11	28	86	59	

NATER SUPPLY OUTLOOK Cellent With Rispect to Usual Supply					
	Flow Payrod				
STREAM of AREA	Spling Sesson	Lais			
COLORADO Sangre de Cristo Cr	Poor	Poor			
Trinchera Creek	Poor	Poor			
NEW MEXICO					
Embuda Craak	Poor	Poor			

### Poor Poor Mora River Poor Poor Nambe Creek Poor Poor Rio Ojo Caliante Poor Poor Santa Fe Creek

# YOUR WATER SUPPLY

JANUARY CONTINUED THE PATTERN OF ABNORMALLY LOW PRECIPITATION ESTABLISHED IN DECEMBER THROUGHOUT THE BASIN. SNOWPACK CONDITIONS AT HIGH ELEVATIONS IN THE COLORADO PORTION OF THE BASIN ARE BETTER THAN THE DROUGHT YEAR OF 1977. HOW-EVER, HANY SNOW COURSES IN THE SANGRE DE CRISTO RANGE IN NEW MEXICO RECORDED AMOUNTS BELOW 1977 AND ESTABLISHED NEW MINIMUMS OF RECORD. THE MOUNTAIN SNOWPACK IN THE RIO GRANDE BASIN IN COLORADO IS 42 PERCENT OF NORMAL WHILE IN NEW MEXICO THE FIGURE DROPS TO 30 PERCENT. AS A RESULT OF THE EXTREMELY DRY CONDITIONS EXPERIENCED THIS WINTER, SPRING RUNOFF IS FORECAST TO BE 40 TO 60 PERCENT BELOW AVERAGE THROUGHOUT THE BASIN. THESE FORECASTS ASSUME NORMAL PRECIPITATION FOR THE REMAINDER OF THE WINTER AND SPRING. STORAGE IN NEW EXICO RESERVOIRS IS 232 PERCENT OF NORMAL AND 17 PERCENT ABOVE A YEAR AGO.

FORECAST POINT	Forecast	% of Average	1963-77 Avelage
COLORADO (April-September)			
Rio Grande at Wagon Wheel Cap Alamosa Creek above Terrace Reservoir	190	65 63	292.0
	40		63.0
Conejos River near Mogote (1)	115	63	183.0
Culebra Creek at San Luis (2)	9	59	15.3
La Jara Creek near Capulin	4	53	7.0
Los Pinos River near Ortiz	130	64	61.3
Rio Grande at Thirty Mile Bridge (3)	75	63	119.
Rio Grande near Del Norte (3)	300	65	462.
Saguache Creek near Saguache	20	66	30.
San Antonio River at Ortiz	7	57	12.
South Fork of Rio Grande at South Fork	77	65	119.
Trinchera Water Supply (April-July)(6) NEW MEXICO (March-July)	14	63	21.
Costilla Creek at Costilla (4)	10	65	15.
Jemez River near Jemez	20	60	33.
Pecos River at Pecos	23	61	38.
Red River at Mouth	17	62	27.
Rio Chama at El Vado	105	59	177.
Rio Crande at Otowi (5)	275	55	497.
Rio Grande at San Marcial (5)	127	38	335.
Rio Hondo near Valdez	8	62	12.
Rio Pueblo de Taos near Taos	9	47	19.
Santa Cruz River at Cundiyo	7	60	11.

NEW MEXICO

Red River

Pecos

SUMMARY OF SHOW MEASUREMENTS

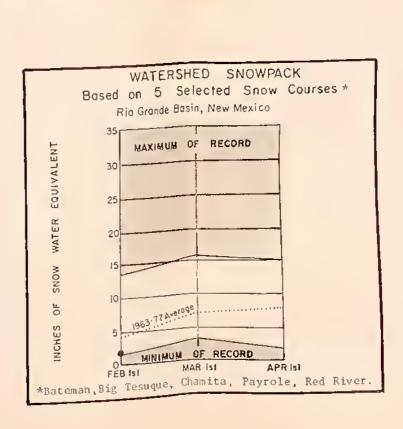
# SUMMARY of SNOW MEASUREMENTS

RIVER BASIN	Number of	THIS YEAR'S SNOW WATER AS PERCENT OF			
SUS-WATERSHED	Coulins Avilaged	Lasi Teal	1963:77 Avalage		
COLO RADO					
Alamosa	1	0	0		
Conejos	5	33	41		
Culebra	4	27	30		
Rio Crande, CO	13	35	47		

# SHOW COURSE MEASUREMENTS

	DATE	SNOW	WATER CONTENT	WATER CONTENT (INCHES)	
SNOW COURSE	SURVEY	(INCHES)	(INCHES)	LAST TEAR	AVG. 63-77
RIO GRANDE BASIN-COLO.					
Lily Pond Silver Lakes	1/29 1/29	14	3.2	12.1	3.9
Conejos River  Cumbres Pass Cumbres Trestle La Manga Pinos Mill Platoro River Springs	1/27 1/27 1/27 1/27 1/30 1/29 Not S	18 28 25 25 19 Schedul	5.2 7.2 5.7 6.6 4.5	21.4 26.7 16.6 12.5 12.4	13.1 14.3 11.1 22.3 11.2 4.5
Culebra River  Brown Cabin Culebra La Veta Pass (B) Trinchera (B)	1/28 1/28 1/28 1/28	4 7 10 9	0.8 1.5 2.6 1.9	6.2 6.3 6.4 5.9	4.6 5.8 5.9 6.2
Rio Grande  Big Meadows Cochetopa Pass Crayback Hiway Lake Humphrey Love Lake Middle Creek Pass Creek Pool Table Porcupine Santa Maria Upper Rio Grande Wolf Creek Pass Wolf Cr. Summit (B)	1/28 1/21 1/26 1/27 1/26 1/27 1/27 1/27 1/28 1/28 1/30 1/27 1/27	14 6 18 27 11 13 28 16 8 13 2 15 31	4.0 1.0 4.0 8.3 2.0 2.8 6.2 4.0 1.3 2.4 0.3 2.7 9.6 9.9	14.2 3.9 7.5 22.6 5.3 8.2 17.1 14.3 4.3 6.5 3.8 9.3 24.1	9.2 3.6 9.1 15.6 4.7 5.2  8.7 4.1 6.9 3.3 5.6 17.9 18.5

# WATERSHED SNOWPACK Bosed on 5 Selected Snow Courses \* Rio Grande Basin, Colorado MAXIMUM OF RECORD APR. ISI MAR. 1st \*Cumbres Pass, La Veta Pass, Silver Lakes, Upper



# Rio Chama Rio Grande, NM

### SHOW COURSE MEASUREMENTS RIO GRANDE BASIN - NM Pecos River 1/28 0 0.0 2.6 2.8 Hematite Park (B) 1/28 7 1.4 4.9 4. Red River Rio Chama 1/27 16 2.9 11.2 6.5 1/28 3 0.4 4.9 2.8 Bateman Chama Divide 1/28 15 2.2 8.7 5.7 Chamita Río Grande 1/29 8 1.3 4.1 3.3 Alamitos 1/26 0 0.0 --- --1/28 0 0.0 3.8 4.0 Bernal Trail (B) Big Tesuque Not Scheduled Cordova 0 0.0 1.6 Elk Cabin Gallegos Peak 1/27 21 5.4 11.7 Hopewell La Cueva North Costilla Payrole 1/29 17 Quemazon Rio En Medio San Antonio Sink Sandoval Senorita Divide Taos Canyon 1/29 3 0.5 3.8 3.5 Tres Ritos

1/29 33 7.6 18.4

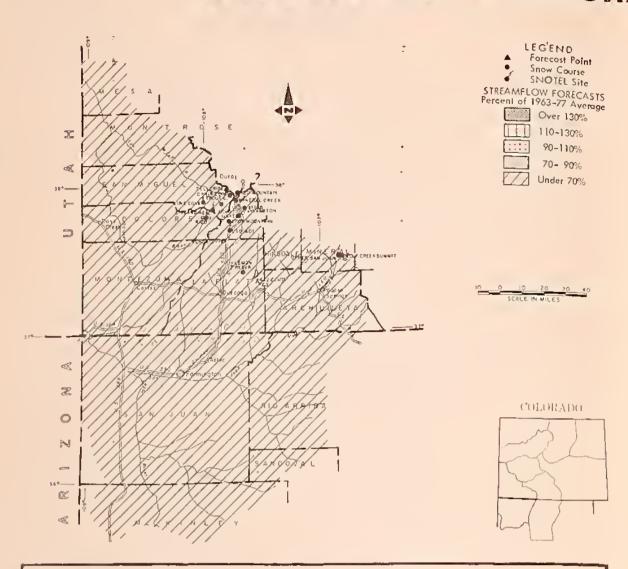
NS-No survey. (B)-On adjacent drainage.

Taos Powderhorn

Rio Hondo

NS-No survey. (B)=On adjacent drainage.

# SAN MIGUEL, DOLORES, ANIMAS AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO



### YOUR WATER SUPPLY

JANUARY BROUGHT NO RELIEF FROM THE DRY CONDITIONS OF DECEMBER. CONSEQUENTLY,
THE MOUNTAIN SNOWPACK IS NEARLY 60 PERCENT BELOW NORMAL AND 67 PERCENT BELOW A
YEAR AGO. THE CURRENT CONDITION IS NOT AS SEVERE AS IN 1977 BUT UNLESS
ABNORMALLY HEAVY PRECIPITATION IS RECEIVED FOR THE REST OF THE WINTER, WATER
SUPPLIES NEXT SUMMER WILL BE SHORT IN ALL AREAS. FORECASTS OF SPRING RUNOFF
RANGE FROM 55 TO 68 PERCENT OF AVERAGE. ABOVE NORMAL STORAGE IN MAJOR
RESERVOIRS IN THE BASIN WILL HELP REDUCE THE IMPACT OF THE EXPECTED LOW FLOWS
LATER THIS YEAR.

# STREAMFLOW FORECASTS (1000 Ac. Ft.) April - September

FORECAST POINT	Forecast	% of Average	1963-77 Average
Florida River at Bondad	19	60	31.0
Animas River at Durango	285	67	425.0
Dolores River at Dolores	145	62	233.0
La Plata River at Hesperus	14	60	23.5
Los Pinos River nr Bayfield (1)	131	64	204.0
Mancos River near Towaoc (2)	12	55	21.9
Inflow to Navajo River (1 & 3)	375	62	608.0
Piedra Creek nr Arboles	135	67	201.0
San Juan River nr Carracas	250	68	370.0
San Niguel River nr Placerville	80	64	124.0

12 Observed flow plus change in process in Idlicato Resistant - 127 Wooch-July - (3) April-July.

# WATER SUPPLY OUTLOOK Explessed as "Poor Fast Average, Ex-

	Fton Period		
STREAM OF AREA	Spling Season	Late 5/8300	
Hermosa Creek West Dolores River Williams Creek	Fair Fair Poor	Poor Poor	

# RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

Basin of Stream	Usable	· ·		
RESERVOIR	Capatily	Tires Year	L mt fear	191,3-2/ Avelage
Groundhog	22	0	9	10
Jackson Gulch	10	4	1	5
Lemon	40	23	19	18
Navajo	1696	1302	1157	729
Vallecito	126	58	44	54

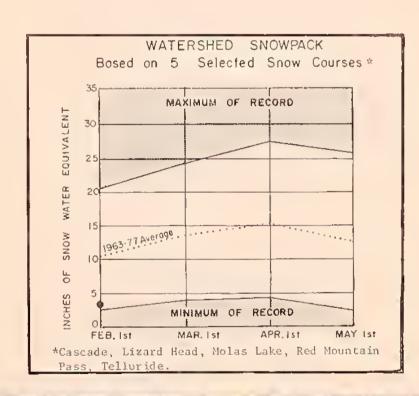
# SUMMARY of SNOW MEASUREMENTS

RIVER BASIN	Number of Courses	THIS YEAR S SNUA MATER AS PERCENT OF			
SUB-WATERSHED	Averaged	yanı Yes-	1969-77 Average		
Animas Dolores San Juan	8 5 5	28 36 36	34 42 51		

### SHOW COURSE MEASUREMENTS

	CURA	ENT INFORM	ATION	PAST RE	CORD
SHOW COURSE	DATE	SNO*	MATER CONTENT (INCHES)	WATER CO	NTENT ESI
	SURVEY	INCHES)	(INCHES)	LAST FEAR	AVG. 63-77
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	1/28	13	3.0	11.6	8.6
Lemon	1/29	7	1.6	12.5	6.3
Mineral Creek	1/28	16	3.3	11.1	9.9
Molas Lake	1/28	8	1.8	9.8	9.0
Purgatory	1/28	28	6.8	18.3	13.9
Red Mt. Pass (B)	1/28	38	8.8	18.3	18.9
Silverton Sub-Sta.	1/28	0	0.0	6.4	6.2
Spud Mountain	1/28	19	4.8	17.9	15.5
Dolores River					
Groundhog	2/01	23	3.6	9.3	
Houser Camp	Not S	chedul	ed		
Lizard Head	1/29	22	4.6	11.6	10.8
Lone Cone	1/29	27	6.0	13.4	11.2
Ophir Loop	1/28	18	3.8	10.0	
Rico	1/29	4	1.0	9.4	5.8
Telluride	1/28	18	2.9	4.7	
Trout Lake	1/28	15	3.3	10.7	9.0
San Juan River					
Chama Divide (B)	1/28	3	0.4	4.9	2.8
Chamita (B)	1/28	15	2.2	8.7	5.7
La Plata	1/29	10	2.6	24.2	
Mancos T-Down	1/29	14	3.3	15.3	
Upper San Juan	1/27	33	10.8	28.0	19.5
Wolf Cr. Pass (B)	1/27	31	9.6	24.1	17.9
Wolf Cr. Summit	1/27	32	9.9	24.7	18.5

15-70 survey. (B)-On adjacent drainage.



# WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

# -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarran, Shavono, and Uncampangre Soil Canservation Districts.

# -COLORADO RIVER WATERSHED

Describe water supply conditions in DeBeque, Plateau Volley, Mesa, Baokcliff, Eogle County, Middle Pork, South Side, and Mt. Sapris Soil Conservation Districts.

# -SOUTH PLATTE RIVER WATERSHED

Describes water supply canditions in Fart Collins, Big Thompson, Langmont, Boulder Volley, Jefferson, Teller-Park, Douglas County, Margan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts. Also describes water supply conditions in Sedgwick, South Plotte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

# -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Maffat, West Routt, East Routt, North Park, White River, and Dauglas Creek Soil Conservation Districts.

# -ARKANSAS RIVER WATERSHED

Describes water supply canditions in Lake County, Upper Arkansas, Fremant, Custer Caunty Divide, Fauntain Volley, Black Squirrel, Central Colarada, Turkey Creek, South Pueblo, Olney Baane, Cheyenne, Upper Huerfana, Spanish Peoks, Purgatoire River, Trinchera, Western Baco, Southeostern Baco, Two Buttes, Bent, Timpas, Notheast Prowers, Prowers, Kiawo Caunty, West Otero, East Otero, Prairie, Hi Plains, and Double El Soil Conservation

# -RIO GRANDE WATERSHED

Describes water supply canditions in Rio Grande, Center, Conejos, Masco Hooper, and Costilla, Soil Conservation Districts. Also describes water supply conditions in UpperChama East Ria Arriba, Taos, Lindrith, Jemez, Santa Fe-Pojoaque, Sandovol, Tijeras, Cuba and Edgewood Soil Canservation Districts.

# -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply canditions in Son Miguel Basin, Dove Creek, Dolores, Mancos, LaPloto, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.